# CHAPTER 29 DEEP SEDATION/GENERAL ANESTHESIA, CONSCIOUS SEDATION AND NITROUS OXIDE INHALATION ANALGESIA

[Prior to 5/18/88, Dental Examiners, Board of [320]]

**650—29.1(153) Definitions.** For the purpose of these rules relative to the administration of deep sedation/general anesthesia, conscious sedation, and nitrous oxide inhalation analgesia by licensed dentists the following definitions shall apply:

"Antianxiety premedication" is the prescription/administration of pharmacologic substances for the relief of anxiety and apprehension which does not result in a depressed level of consciousness.

"Conscious sedation" is a depressed level of consciousness produced by the administration of pharmacologic substances, that retains the patient's ability to independently and continuously maintain an airway and respond appropriately to physical stimulation or verbal command.

"Deep sedation/general anesthesia" is a controlled state of unconsciousness, produced by a pharmacologic agent, accompanied by a partial or complete loss of protective reflexes, including inability to independently maintain an airway and respond purposefully to physical stimulation or verbal command.

"Nitrous oxide inhalation analgesia" refers to the administration by inhalation of a combination of nitrous oxide and oxygen producing an altered level of consciousness that retains the patient's ability to independently and continuously maintain an airway and respond appropriately to physical stimulation or verbal command.

#### 650-29.2(153) Prohibitions.

- **29.2(1)** *Deep sedation/general anesthesia.* Dentists licensed in this state shall not administer deep sedation/general anesthesia in the practice of dentistry until they have obtained a permit as required by the provisions of this chapter.
- **29.2(2)** Conscious sedation. Dentists licensed in this state shall not administer conscious sedation in the practice of dentistry until they have obtained a permit as required by the provisions of this chapter.
- **29.2(3)** *Nitrous oxide inhalation analgesia.* Dentists licensed in this state shall not administer nitrous oxide inhalation analgesia in the practice of dentistry until they have complied with the provisions of 29.6(153).
- **29.2(4)** Antianxiety premedication. Dentists licensed in this state shall not administer antianxiety premedication in the practice of dentistry until they have complied with the provisions of 29.7(153).

### 650—29.3(153) Requirements for the issuance of deep sedation/general anesthesia permits.

- **29.3(1)** A permit may be issued to a licensed dentist to use deep sedation/general anesthesia on an outpatient basis for dental patients provided the dentist meets the following requirements:
- a. Has successfully completed Part II of the American Dental Association Council on Dental Education Guidelines: and
  - b. Has formal training in airway management; or
- c. Has completed a minimum of one year of advanced training in anesthesiology and related academic subjects beyond the undergraduate dental school level in a training program approved by the board; or

- d. Is a diplomate of the American Board of Oral and Maxillofacial Surgery; or
- e. Is eligible for examination by the American Board of Oral and Maxillofacial Surgery; or
- f. Is a member of the American Association of Oral and Maxillofacial Surgeons; or
- g. Is a Fellow of the American Dental Society of Anesthesiology.
- **29.3(2)** When an applicant has not met the above requirements, the applicant must complete a remedial training program in anesthesiology and related academic subjects beyond the undergraduate dental school level. The remedial training program must be prior approved by the board. The applicant may be subject to professional evaluation as part of the application process. The professional evaluation shall be conducted by the Anesthesia Credentials Committee and include, at a minimum, evaluation of the applicant's knowledge of case management and airway management.
- **29.3(3)** A dentist using deep sedation/general anesthesia shall maintain a properly equipped facility. The facility shall maintain and the dentist shall be trained on the following equipment: anesthesia or analgesia machine, EKG monitor, positive pressure oxygen, suction, laryngoscope and blades, endotracheal tubes, magill forceps, oral airways, stethoscope, blood pressure monitoring device, pulse oximeter, emergency drugs, defibrillator. The facility shall be staffed with trained auxiliary personnel capable of reasonably handling procedures, problems and emergencies incident to the administration of general anesthesia. A licensee may submit a request to the board for waiver of any of the provisions of this subrule. Waiver requests will be considered by the board on an individual basis, and shall be granted only if the board determines that there is a reasonable basis for the waiver.
- **29.3(4)** A dentist administering deep sedation/general anesthesia must document and maintain current, successful completion of an Advanced Cardiac Life Support (ACLS) course and the auxiliary personnel shall maintain current certification in basic life support and be capable of administering basic life support.
- **29.3(5)** A dentist who is performing a procedure for which deep sedation/general anesthesia was induced shall not administer the general anesthetic and monitor the patient without the presence and assistance of at least two qualified auxiliary personnel in the room who are qualified under subrule 29.3(4).
- **29.3(6)** A dentist qualified to administer deep sedation/general anesthesia under this rule may administer conscious sedation and nitrous oxide inhalation analgesia provided the dentist meets the requirements of 29.6(153).
- **29.3**(7) A licensed dentist who has been utilizing deep sedation/general anesthesia in a competent manner for the five-year period preceding July 9, 1986, but has not had the benefit of formal training as outlined in this rule, may apply for a permit provided the dentist fulfills the provisions set forth in 29.3(3), 29.3(4), and 29.3(5).

# 650—29.4(153) Requirements for the issuance of conscious sedation permits.

- **29.4(1)** A permit may be issued to a licensed dentist to use conscious sedation on an outpatient basis for dental patients provided the dentist meets the following requirements:
- a. Has successfully completed Parts I and III of the American Dental Association Council on Dental Education Guidelines; and
  - b. Has formal training in airway management; or

- c. Has submitted evidence of successful completion of conscious sedation experience at the graduate level, which is approved by the board. The applicant shall document this experience by specifying the type of experience; the number of hours; the length of training; and the number of patient contact hours including documentation of the number of supervised conscious sedation cases; or
- d. Has successfully completed a formal training program, approved by the board, which included physical evaluation, IV sedation, airway management, monitoring, basic life support and emergency management.
- **29.4(2)** When an applicant has not met the above requirements, the applicant must complete a remedial training program in conscious sedation and related academic subjects beyond the undergraduate dental school level. The remedial training program shall be prior approved by the board. The applicant may be subject to professional evaluation as part of the application process. The professional evaluation shall be conducted by the anesthesia credentials committee and include at a minimum the evaluation of the applicant's knowledge of case management and airway management.
- **29.4(3)** A dentist utilizing conscious sedation shall maintain a properly equipped facility. The facility shall maintain and the dentist shall be trained on the following equipment: anesthesia or analgesia machine, EKG monitor, positive pressure oxygen, suction, laryngoscope and blades, endotracheal tubes, magill forceps, oral airways, stethoscope, blood pressure monitoring device, pulse oximeter, emergency drugs, defibrillator. The facility shall be staffed with trained auxiliary personnel capable of reasonably handling procedures, problems, and emergencies incident to the administration of conscious sedation. A licensee may submit a request to the board for waiver of any of the provisions of this subrule. Waiver requests will be considered by the board on an individual basis and shall be granted only if the board determines that there is a reasonable basis for the waiver.
- **29.4(4)** A dentist administering conscious sedation must document and maintain current, successful completion of an Advanced Cardiac Life Support (ACLS) course, and the auxiliary personnel shall maintain certification in basic life support and be capable of administering basic life support.
- **29.4(5)** A dentist who is performing a procedure for which conscious sedation is being employed shall not administer the pharmacologic agents and monitor the patient without the presence and assistance of at least one qualified auxiliary personnel in the room who is qualified under subrule 29.4(4).
- **29.4(6)** A licensed dentist who has been utilizing conscious sedation on an outpatient basis in a competent manner for five years preceding July 9, 1986, but has not had the benefit of formal training as outlined in this rule, may apply for a permit provided the dentist fulfills the provisions set forth in subrules 29.4(3), 29.4(4) and 29.4(5).
- **29.4(7)** Dentists qualified to administer conscious sedation may administer nitrous oxide inhalation analgesia provided they meet the requirement of 29.6(153).
- **29.4(8)** If conscious sedation results in a general anesthetic state, the rules for deep sedation/general anesthesia apply.

### 650—29.5(153) Application for permit.

- **29.5(1)** No dentist shall use or permit the use of deep sedation/general anesthesia or conscious sedation in a dental office for dental patients, unless the dentist possesses a current permit issued by the Iowa board of dental examiners. A dentist holding a permit shall be subject to review and facility inspection as deemed appropriate by the board.
- **29.5(2)** An application for a deep sedation/general anesthesia permit must include the appropriate fee as specified in 650—Chapter 15, as well as evidence indicating compliance with rule 29.3(153).
- **29.5(3)** An application for a conscious sedation permit must include the appropriate fee as specified in 650—Chapter 15, as well as evidence indicating compliance with rule 29.4(153).

- **29.5(4)** A provisional permit may be granted the new applicant based solely on credentials until all processing and investigation have been completed. A provisional permit may be issued only if the applicant will be practicing at a facility that has been previously inspected and approved by the board.
- **29.5(5)** Permits shall be renewed biennially following submission of proper application and may involve board reevaluation of credentials, facilities, equipment, personnel, and procedures of a previously qualified dentist to determine if the dentist is still qualified. The appropriate fee for renewal as specified in 650—Chapter 15 of these rules must accompany the application.
- **29.5(6)** Based on the evaluation of credentials, facilities, equipment, personnel and procedures of a dentist, the board may determine that restrictions may be placed on a permit.
- **29.5(7)** The actual costs associated with the on-site evaluation of the facility shall be the primary responsibility of the licensee. The cost to the licensee shall not exceed \$150 per facility.

# 650—29.6(153) Nitrous oxide inhalation analgesia.

- **29.6(1)** A dentist may use nitrous oxide inhalation analgesia sedation on an outpatient basis for dental patients provided the dentist:
  - a. Has completed a board approved course of training; or
- b. Has training equivalent to that required in 29.6(1) "a" while a student in an accredited school of dentistry, and
- c. Has adequate equipment with fail-safe features and minimum oxygen flow which meets FDA standards.
- d. Performs routine maintenance on equipment every two years and maintains documentation of such maintenance, and provides such documentation to the board upon request.
- **29.6(2)** A dentist utilizing nitrous oxide inhalation analgesia and auxiliary personnel shall be trained and capable of administering basic life support.
- **29.6(3)** A licensed dentist who has been utilizing nitrous oxide inhalation analgesia in a dental office in a competent manner for the 12-month period preceding July 9, 1986, but has not had the benefit of formal training outlined in paragraph 29.6(1) "a" or 29.6(1) "b," may continue the use provided the dentist fulfills the requirements of paragraphs 29.6(1) "c" and "d" and subrule 29.6(2).
- \*29.6(4) Dental hygienists may under direct supervision, pursuant to 650—10.3(153) of these rules, assist the dentist with the monitoring of nitrous oxide inhalation analgesia, so long as the dentist has established an office protocol for taking vital signs, adjusting anesthetic concentrations, and addressing emergency situations that may arise during monitoring. The requirements of 29.6(2) and 29.6(5) must be satisfied. The dentist must carry out the appropriate physical evaluation of the patient. The dentist shall induce the nitrous oxide inhalation analgesia and shall be available for consultation or treatment during the rest of the procedure. It must be determined by the dentist that the patient is appropriately responsive and physiologically stable prior to discharge.
- \*29.6(5) The dental hygienist shall satisfactorily complete a course of instruction in the use of nitrous oxide inhalation analgesia which includes both didactic and clinical instruction offered by a teaching institution accredited by the American Dental Association. The course of study shall include instruction in the theory of pain control, anatomy, medical history, pharmacology and emergencies and complications. Dental hygienists who have been assisting in the monitoring of nitrous oxide inhalation analgesia under the direct supervision of a licensed dentist in a competent manner for the previous 12-month period, but have not had the benefit of a formal course of instruction, may continue to assist with the monitoring of nitrous oxide inhalation analgesia under the direct supervision of a licensed dentist provided the dental hygienist meets the requirements of subrule 29.6(2).
- \*29.6(6) If the dentist intends to achieve a state of conscious sedation from the administration of nitrous oxide inhalation analgesia, the rules for conscious sedation apply.

<sup>\*</sup>Effective date (9/15/99) delayed until the end of the 2000 Session of the General Assembly by the Administrative Rules Review Committee at its meeting held September 15, 1999.

#### 650—29.7(153) Antianxiety premedication.

- **29.7(1)** Antianxiety premedication is the prescription or administration of pharmacologic substances for the relief of anxiety and apprehension.
- **29.7(2)** The regulation and monitoring of this modality of treatment are the responsibility of the ordering dentist.
- **29.7(3)** If a dentist intends to achieve a state of conscious sedation from the administration of an antianxiety premedication, the rules for conscious sedation shall apply.
- **29.7(4)** A dentist utilizing antianxiety premedication and auxiliary personnel shall be trained in and capable of administering basic life support.
- **650—29.8(153) Noncompliance.** Violations of the provisions of this chapter may result in revocation or suspension of the dentist's permit or other disciplinary measures as deemed appropriate by the board.

# 650—29.9(153) Reporting of adverse occurrences related to deep sedation/general anesthesia, conscious sedation, nitrous oxide inhalation analgesia, and antianxiety premedication.

**29.9(1)** Reporting. All licensed dentists in the practice of dentistry in this state must submit a report within a period of 30 days to the board of any mortality or other incident which results in temporary or permanent physical or mental injury requiring hospitalization of the patient during, or as a result of, antianxiety premedication, nitrous oxide inhalation analgesia, conscious sedation or deep sedation/general anesthesia related thereto. The report shall include responses to at least the following:

- a. Description of dental procedure.
- b. Description of preoperative physical condition of patient.
- c. List of drugs and dosage administered.
- d. Description, in detail, of techniques utilized in administering the drugs utilized.
- *e*. Description of adverse occurrence:
- 1. Description, in detail, of symptoms of any complications, to include but not be limited to onset, and type of symptoms in patient.
  - 2. Treatment instituted on the patient.
  - 3. Response of the patient to the treatment.
  - f. Description of the patient's condition on termination of any procedures undertaken.
- **29.9(2)** Failure to report. Failure to comply with subrule 29.9(1), when the occurrence is related to the use of deep sedation/general anesthesia, conscious sedation, nitrous oxide inhalation analgesia, or antianxiety premedication, may result in the dentist's loss of authorization to administer deep sedation/general anesthesia, conscious sedation, nitrous oxide inhalation analgesia, or antianxiety premedication or in other sanctions provided by law.

#### 650—29.10(153) Anesthesia credentials committee.

**29.10(1)** The anesthesia credentials committee is a peer review committee appointed by the board to assist the board in the administration of this chapter. This committee shall be chaired by a member of the board and shall include at least six additional members who are licensed to practice dentistry in Iowa. At least four members of the committee shall hold deep sedation/general anesthesia or conscious sedation permits issued under this chapter.

**29.10(2)** The anesthesia credentials committee shall perform the following duties at the request of the board:

- a. Review all permit applications and make recommendations to the board regarding those applications.
- b. Conduct site visits at facilities under subrule 29.5(1) and report the results of those site visits to the board. The anesthesia credentials committee may submit recommendations to the board regarding the appropriate nature and frequency of site visits.

- c. Perform professional evaluations under subrules 29.3(2) and 29.4(2) and report the results of those evaluations to the board.
- **650—29.11(153) Renewal.** Beginning 12 months from December 10, 1997, and for each renewal thereafter, permit holders are required to maintain evidence of renewal of ACLS certification.

Beginning 12 months from December 10, 1997, and for each renewal thereafter, permit holders are required to submit a minimum of six hours of continuing education in the area of sedation. These hours may also be submitted as part of license renewal requirements.

**650—29.12(153) Rules for denial or nonrenewal.** A dentist who has been denied a deep sedation/general anesthesia or conscious sedation permit or renewal may appeal the denial and request a hearing on the issues related to the permit or renewal denial by serving a notice of appeal and request for hearing upon the executive director not more than 30 days following the date of the mailing of the notification of the permit or renewal denial, or not more than 30 days following the date upon which the dentist was served notice if notification was made in the manner of service of an original notice. The hearing shall be considered a contested case proceeding and shall be governed by the procedures set forth in 650 IAC 51.

**650—29.13(153) Record keeping.** The patient chart must include preoperative and postoperative vital signs, drugs administered, dosage administered, anesthesia time in minutes, and monitors used. Intermittent vital signs shall be taken and recorded in patient chart during procedures and until the patient is fully ambulatory. The chart should contain the name of the person to whom the patient was discharged.

These rules are intended to implement Iowa Code sections 153.33 and 153.34.

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